

Adopted Levels: not observed

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh		NDS 113, 1563 (2012)	28-May-2012

$S(p)=5\times10^2 \text{ SY}$; $Q(\alpha)=-1.01\times10^4 \text{ SY}$ [2012Wa38](#)

Note: Current evaluation has used the following Q record.

$\Delta S(p)=357$, $\Delta Q(\alpha)=585$ ([2011AuZZ](#)).

$Q(\varepsilon p)=15947\ 298$, $S(2p)=-1474\ 298$ (syst,[2011AuZZ](#)).

Values in [2003Au03](#) (from syst): $S(p)=900\ 360$, $Q(\alpha)=-9360\ 420$, $Q(\varepsilon p)=15250\ 300$, $S(2p)=-780\ 300$.

$S(p)=480 \text{ SY}$; $Q(\alpha)=-10063 \text{ SY}$ [2011AuZZ](#)

[1996PoZZ](#): re-analysis of upper limits for $T_{1/2}$ obtained at LISE (GANIL). Unstable to proton emission. No evidence was found for the existence of ^{34}Ca .

^{34}Ca is a candidate for two-proton emission since $S(2p)$ is negative.

Structure calculations: [2002Zh09](#), [2001Yo12](#), [1998Co30](#).

Two-proton decay calculations: [2004Pf02](#), [2003Gr04](#).

Giant-resonances calculations: [2001Sa57](#), [1997Ha57](#).

[Additional information 1](#).

 ^{34}Ca Levels

E(level)	J^π	$T_{1/2}$	Comments
0	0^+	<35 ns	%p=?; %2p=? $T_{1/2}$: upper limit estimated from expected cross sections (1996PoZZ). ^{34}Ca is a candidate for two-proton emission since $S(2p)$ is negative.